

**CHAPTER 115: EMISSION LICENSE REGULATIONS**

**SUMMARY:** This regulation implements Section 590 of Title 38 Maine Revised Statutes. It specifies who must obtain an air emission license, what information an applicant must submit and what standards and criteria he must comply with. Section 6(C) was amended to specify the circumstances under which the Lowest Achievable Emission Rate is required of a new major emitting source.

**NOTE:** The requirements of 38 M.R.S.A. Section 344 and D.E.P. Regulations, Chapter 1, as amended, shall govern the processing of applications under this Chapter.

**I. Applicability**

**A. Geographic scope.** This regulation shall be effective in all ambient air quality control regions in this State.

**NOTE:** Any major new source or major modification which proposes to locate within the bounds of any Indian Reservation may also need to apply to the U.S. Environmental Protection Agency (EPA) for a federal Prevention of Significant Deterioration (PSD) permit, federal nonattainment area new source review permit, and/or a federally issued operating permit.

**B. Effective date.** This Chapter shall be effective 90 days after the close of Legislature 1990 (April 14).

**II. Prohibition**

**A. General.** No person shall emit or cause to be emitted air contaminants from any source without an air emission license from the Department unless the source is exempt pursuant to subsection C .

**B. New sources or modifications.** No person shall commence construction of any source or modify an existing source without a license unless the source is exempt pursuant to subsection C. Approval to construct shall become invalid if the source has not commenced construction within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Department may

extend this time period upon a satisfactory showing that a extension is justified, but may condition such extension upon a review of either the control technology requirements or the ambient air quality impact analysis, or both. Any source or modification which results in a significant emissions increase solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operations, shall be considered a new or modified source with respect to Sections III(B), V(B), VI(B) and VII(C) or (D) of this Chapter.

**C. License exemptions.** An air emission license is not required for the following sources or emissions units, except that once a source requires an air emission license, all emissions units at the source must be included. In no case shall these exemptions apply to any major source or major modification.

1. Fuel-burning equipment (or combinations thereof) whose total heat input is less than 10 million British Thermal Units;
2. Incinerators of the type Class I and IA;
3. General process sources or general process equipment whose emissions without consideration of air pollution control apparatus and under normal operation are less than 100 pounds per day, or 10 pounds per hour of any regulated pollutant, except that these numerical limitations may not apply to a source which is subject to regulation for the control of hazardous air pollutants pursuant to Title 38 M.R.S.A. Section 585-B, or New Source Performance Standards promulgated at 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated at 40 CFR Part 61;
4. Emissions units whose sole function is to provide power for mobile sources, including vessels;
5. Bulk gasoline terminals with a daily throughput of less than 20,000 gallons;
6. Bulk petroleum storage facilities with a gasoline or crude oil stored in tanks with a capacity of less than 39,000 gallons;
7. Sources which without consideration of air pollution control apparatus and under normal operation emit less than 0.6 ton of lead per year; and
8. Any change to a source presently exempt from licensing unless that change increases the total capacity of the source to greater than the exemptions provided for in this section.

**D. License exemption for pollution control projects.** Pollution control projects shall be exempt from the requirements of this Chapter to the extent allowed under the Clean Air Act, as determined by the Department on a case-by-case basis. To be exempt, the applicant must demonstrate that the proposed pollution control project is consistent with and meets all requirements of applicable State and EPA rules, policies and guidelines which specifically address exemptions from New Source Review and Prevention of Significant Deterioration programs for pollution control projects.

### III. Application

**A. Existing sources.** Applications for renewal of existing sources shall be submitted at least 90 days prior to the expiration date of the current air emission license. The application shall be on a form prescribed by the Department and shall include records to accurately document compliance, including:

1. Operating rates;
2. Use of materials that result in emission of air contaminants and the nature and amount of resulting emissions;
3. Results of instack monitoring required by the Department;
4. Results of stack testing required by the Department;
5. Results of meteorology or air quality monitoring required by the Department;
6. Results of impact analyses that have been required by the Department;
7. Operating and maintenance records of air pollution control apparatus required by the Department; and
8. Any other such information necessary to determine the efficiency of any air pollution control apparatus or otherwise identify the types and quantities of air contaminants expected to be emitted from each emissions unit.

**B. New sources or modifications.** In addition to the information required for an existing source, the owner or operator of a new source or modification shall submit the following:

1. A description of the nature, location (identified on an original U. S . Geological Survey Topographical map), design, construction, operation, design capacity, maximum capacity, and typical operating schedule of the source or

modification, including specifications and drawings showing design and plant layout;

2. A schedule for construction of the source or modification;
3. A detailed description of the air pollution control equipment, process control and monitor, and any other system of continuous emission reduction planned by the source or modification and such other information required to accurately establish emission estimates, document future compliance, and to determine that the control technology requirements of Section VI are satisfied;
4. The analysis and information required by the Department including meteorological and topographical data necessary to estimate the air quality impact (See Section VII); and
5. The air quality impacts and the nature and extent of emissions from all general commercial, residential, industrial, and other growth, including associated mobile sources, which has occurred since August 7, 1977, in the area the source or modification would affect.

**C. Phased construction project.** An applicant who intends to construct a phased construction project in which the construction phases exceed 18-months or the term of the emission license, whichever is less, shall submit an application for an amended emission license for each future phase which includes a new BACT determination for each future phase.

**D. Acceptability.** An application for an emission license or amendment shall not be deemed acceptable for processing until all information and data required to evaluate the application have been submitted. The fact that an application is deemed acceptable for processing does not prohibit the Commissioner from requesting further relevant information and data. No application shall be determined to be acceptable for processing until appropriate Federal Land Managers and Indian Governing Bodies have been notified as required at Sections VII and IX of this Chapter.

**NOTE:** It is suggested that a prospective applicant request a pre-application meeting prior to submitting an application for an air emission license or amendment. At such meeting the applicant will have an opportunity to provide the scope and importance of the project and will be advised of the license requirements, including the information, data, plans, specifications, and protocols that may be required to be furnished with the application.

**E. New source review requirements**

1. Any application for a new source or modification deemed acceptable for processing before November 15, 1992, shall be subject to the new source review requirements in effect, as of November 15, 1992 under Department regulations under the following conditions:

- a. The Department and new source or modification move expeditiously towards final issuance of the air emission license;
- b. Construction of the new source or modification, or a construction phase begins no later than eighteen (18) months from the date of issuance of the air emission license pursuant to Subsection III(C);
- c. Construction of the new source or modification, or construction phase is not discontinued for a period of eighteen (18) months or more; and
- d. Construction of the new source or modification, or construction phase is completed within five (5) years unless extended in writing by the Department.

2. Any application for a new source or modification deemed acceptable for processing after November 15, 1992, shall be subject to the new source review requirements pursuant to Title I, Part D of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. and Chapter 115 and Chapter 113 of the Department's regulations.

#### IV. **Terms of Emission License**

A. **Period.** The term of air emission licenses is 5 years except that the following sources will have a license term of 2 years:

- 1. Sources designed to burn municipal solid waste;
- 2. Sources utilizing innovative air pollution control technology; and
- 3. New sources which have not previously received an air emission license.

The Department may, on a case-by-case basis, establish a term shorter than five years for a major modification which has not previously been included in an air emission license if the Department determines that a need exists to utilize a shorter term in order to establish license conditions for such modification.

B. **Source obligation.** Approval to construct a new source or modify an existing source

or an exemption pursuant to Section II(C) shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state, or federal law.

## **V. Criteria for Granting a License**

### **A. General**

1. Pursuant to the requirements of Title I, Part D of the CAA, the Department shall not issue an air emission license if the EPA has determined that implementation of its State Implementation Plan is inadequate for the nonattainment area in which the proposed source or modification will be constructed.
2. The Department shall grant the license if the applicant, owner or operator demonstrates that the following criteria will be met:
  - a. The emissions will be receiving best practical treatment, including where appropriate the technology requirements specified at Section VI;
  - b. The emissions will not violate applicable emissions standards adopted by the Department pursuant to Title 38, M.R.S.A. Section 585, and 585-B or can be controlled so as not to violate the same;
  - c. The emissions either alone or in conjunction with existing emissions will not violate or can be controlled so as not to violate applicable ambient air quality standards including increments as adopted by the Department pursuant to Title 38 M.R.S.A. Section 584; or for those sources locating within or significantly impacting a nonattainment area, the impact from the emissions is consistent with any plan demonstrating Reasonable Further Progress as defined by Section 171 of the Clean Air Act;
  - d. The emissions from an existing source which has been determined by the Board to be reasonably attributable to impairment to visibility in any Class I area or integral vista (which impairment has been certified by a Federal Land Manager in the case of Federal Lands) shall meet Best Available Retrofit Technology as defined at Chapter 100. Whenever an existing source is required to install and operate additional air pollution control apparatus to achieve BART, it shall do so as expeditiously as practicable but in no case later than 5 years after the Board identifies BART; and

- e. The conditions of the air emission license assure compliance with all relevant requirements of this Chapter and any other applicable requirements.

**B. New sources or modifications.** In addition to the provisions of Subsection A, the Department shall grant the license for a new source or modification, if the applicant, owner or operator demonstrates that the following criteria will be met:

1. With respect to any major new source or major modification, the emissions would not have an adverse impact on the air quality related values (including visibility) of any Class I area or integral vista;
2. With respect to any major new source or major modification which results in a significant emissions increase of a nonattainment pollutant which seeks to locate or modify within the geographical boundaries of a nonattainment area or Ozone Transport Region, or which increased emissions will significantly impact a nonattainment area, the applicant shall demonstrate:
  - a. All sources owned or operated by the applicant (or by any entity controlling, controlled by, or under common control with such person) in this State shall be in compliance, or on an federally enforceable schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act, including the terms of any emission license with the terms of any emission license, including applicable emission standards and ambient air quality standards;
  - b. The owner or operator has complied with the applicable provisions of the Offset Regulation, Chapter 113; and
  - c. The owner or operator has conducted an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification; and
3. With respect to any new source or modification which results in emissions of hazardous air pollutants, for which standards have not yet been adopted pursuant to 38 M.R.S.A. 585 - B, the emissions will not exceed the interim guideline values calculated according to procedures developed by the Bureau of Health and approved by the Scientific Advisory Panel.

**C. Renewals**

1. All license renewals must include all control technology requirements, including BACT, LAER, and other operating limitations, imposed on the air emission license originally granted for any emissions unit originally subject to new source review. In no case shall the conditions of the renewed license lessen the stringency of the emission limits upon which the air quality impact assessment was based unless a new impact analysis is provided.
2. Existing sources (other than those associated with new sources or modifications subject to Section II(B)) which cannot demonstrate compliance with one or more of the above criteria, may be granted a renewed air emission license if:
  - a. The emission reduction measures necessary to meet the applicable criteria are required by the license and are implemented and operational as soon as practicable, but no later than 24 months. If the applicant demonstrates that it cannot comply with the term of the license due to factors beyond his control, a later date may be established by the Board; and
  - b. During the period prior to installation and operation of the emission reduction measures required by Section V(C)(I), the actual emissions of the source shall not increase.

## VI. Control Technology

The air pollution control apparatus and equipment, if any, relied upon by an emissions unit in order to achieve the applicable emission limitations and best practical treatment shall be both reliable in conforming to design specifications and expected operating characteristics and dependable in performance.

### A. Existing sources

1. **General.** The applicant shall demonstrate that its emissions comply with the emission standards adopted by the Department and in effect at the time of the submission of a renewal application. The source shall demonstrate that all emissions are receiving Best Practical Treatment (BPT), as defined at Chapter 100. The BPT analysis shall consider the emission limit for which the air pollution control apparatus was designed, its age and life expectancy. The requirement should not force replacement of existing equipment on the basis of more efficient or reliable equipment being available at the time of renewal, but would require replacement with that more efficient or reliable equipment when;



- a. The existing air pollution control apparatus is replaced;
- b. When the emissions unit is found to violate the applicable emission standard;
- c. Additional reductions are necessary to achieve or maintain ambient air quality standards;
- d. Whenever the Board determines that previously uncontrolled emissions should be controlled;
- e. Whenever the Board determines that previously controlled emissions should be controlled to a greater efficiency considering the toxicity of constituents; or
- f. Whenever additional reductions are necessary to restore increment even if that increment has been previously authorized to the applicant.

The BPT provision may require the use of additional instrumentation, operating practices, automated process controls (e.g. viscosity controls for fuel-burning sources), upgrading of component parts (e.g. improved fabric filter materials when old bags are replaced), emission testing including requirements for continuous emission monitors, equipment maintenance programs, or record keeping to demonstrate in-use performance of air pollution control apparatus or other mitigating measures.

Whenever an air pollution control apparatus is replaced, a new BPT finding is necessary to support a license amendment, even if there is no increase in affected pollutants and no increase in ambient air impact of affected pollutants. Such replacement shall conform to the provisions of Section VI regarding reliability.

**2. Nonattainment areas.** An existing source located in or whose emissions significantly impact a nonattainment area shall demonstrate that all emissions of the nonattainment pollutant are receiving Reasonably Available Control Technology (RACT), as defined at Chapter 100. An existing source located within an ozone nonattainment area and whose emissions are significant for ozone (40 tpy VOC) shall demonstrate that all emissions of the nonattainment pollutant are receiving RACT, as defined at Chapter 100.

**3. Visibility impairment.** An existing source whose emissions are determined by the Board of Environmental Protection to be reasonably attributable to impairment to visibility (as certified by the Federal Land Manager for federal lands) in any Class I area or integral vista, defined at Chapter 114, shall

demonstrate that all emissions contributing to the visibility impairment are receiving Best Available Retrofit Technology (BART) as defined at Chapter 100, within 5 years of a BART determination by the Board.

## **B. New sources and modifications**

1. **General.** Any new source or modification of an existing source, not exempted from the licensing requirement pursuant to Section II(C), shall demonstrate that its emissions from any new emissions unit or modification are receiving Best Available Control Technology (BACT), as defined at Chapter 100. Any major new source or major modification for a nonattainment pollutant, which is located within, or significantly impacts, a nonattainment area shall comply with the requirements of Section VI(B)(2).

a. In every case, the applicant is responsible for the submission of the following information as part of the air emissions license application to the degree necessary as determined by the Department to process the application to make the BACT determination:

i. **Proposal of a control system representing BACT.** BACT is required on each emissions unit, including fugitive as well as stack emissions. Technology selection should consider application of flue gas treatment, fuel treatment and processes and techniques which are inherently low polluting and are economically feasible to this source. In cases where technological or economic limitations on the application of measurement techniques would make the imposition of an emission standard infeasible, a design, operating, equipment standard or work practice can be established;

ii. **Presentation of all alternative systems considered that could achieve a higher degree of emission control.** All technically viable alternatives which have greater control capabilities than the system proposed as BACT and which have been used for the same or similar applications should be considered. However, the Department recognizes that the BACT decision may require a trade-off of control among pollutants and sources. If no better control alternative is technically and economically feasible for an emission point, then such finding should be stated and documented in writing. In some cases, a better control technology may be available for a general type of operation. However, unique processing equipment or procedures may create a valid technical reason which would preclude its use. Such situations should be fully supported; and

iii. **For alternative systems not selected.** An applicant must explain why the more stringent level of control is inappropriate for BACT in terms of energy, economic and environmental impacts. The rationale should be presented in the form of an incremental analysis of the impacts of each rejected alternative relative to the proposed BACT system.

b. **Innovative control technology waiver.** An owner or operator of a proposed new source or modification subject to this section may request the Department to grant a waiver from any or all such requirements and to approve a system of innovative control technology in order to encourage the use of such technology. The Department may, with the consent of the Governors of other affected states, grant a waiver necessary for the employment of innovative control technology and determine that the source or modification may employ such system if:

i. The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare or safety in its operation or function;

ii. The owner or operator agrees to achieve a level of continuous emissions reduction greater than or equivalent to that which would have been required by this section by a date approved by the Department, such date no later than 4 years from the time of startup or 7 years from license issuance;

iii. The source or modification would meet the requirements of Section VI and VII based on the emissions rate that the source employing the system of innovative control technology would be required to meet on the date specified by the Department;

iv. The source or modification would not, prior to the date specified under Section B(I)(b)(2) of this section;

(a) Cause or contribute to any violation of any applicable ambient air quality standard;

(b) Impact any area where an applicable ambient increment is known to be violated; or

(c) Impact any Class I area;

v. All other applicable requirements, including those for public

participation, have been met;

vi. The Department shall withdraw any approval to employ a system of innovative control technology if:

(a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;

(b) the proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(c) The Department decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety; and

vii. If a source or modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with Section B(1)(b)(6), the Department may allow the source or modification an additional period, not to exceed 3 years, to meet the requirement for the application of BACT through use of a demonstrated system of control.

**2. Nonattainment areas.** Any new source with significant emissions of a nonattainment pollutant which seeks to locate within the geographical boundaries of a nonattainment area or the Ozone Transport Region, or whose emissions will significantly impact, a nonattainment area, shall demonstrate that the emissions of the nonattainment pollutant are receiving Lowest Achievable Emission Rate (LAER) as defined at Chapter 100. Any emissions from a modification of an existing source which results in a significant emissions increase of a nonattainment pollutant must be shown by the source to be meeting LAER if the source is located within the geographical bounds of a nonattainment area or the Ozone Transport Region or if the emissions of the nonattainment pollutant from the modification significantly impact a nonattainment area. Any source or modification not covered by this section shall comply with the requirements of Section VI(B)(1).

**NOTE:** For the purposes of this section, sources of VOC and NO<sub>x</sub> located outside the bounds of the nonattainment area for ozone or the Ozone Transport Region are presumed to not have a significant impact.

In those cases where the Department has completed redesignation procedures

from nonattainment to attainment but for which the U.S. Environmental Protection Agency (EPA) has not taken final action, EPA's applicability criteria shall apply (Sections 172(b)(6) and 173 of the Clean Air Act).

**NOTE:** LAER is therefore required when Maine designates to nonattainment before EPA action. LAER is required if EPA takes a lead action and designates an area nonattainment. LAER is based on Maine's applicability criteria in all cases except where DEP has amended the attainment status from nonattainment at Chapter 114 in which case EPA's procedures apply.

## VII. **Air Quality Impact Analyses**

A. **General.** It shall be the burden of any applicant to provide an affirmative demonstration that its emissions in conjunction with all other sources will not violate ambient air quality standards, established pursuant to Chapter 110 of Department Regulations, except that sources in nonattainment areas or which significantly impact a nonattainment area shall be required to demonstrate that the source's emissions are consistent with Reasonable Further Progress provisions of the State Implementation Plan. An applicant may use ambient air monitoring, modeling, or other assessment techniques as approved by the Department. The analyses shall include all emissions units at the source, meteorological and topographical data necessary to estimate such impacts, and shall consider the impact of fugitive emissions, to the extent quantifiable, secondary emissions, and emissions from other existing sources including increases in mobile and area source emissions impacting the same area. The level of analysis shall depend upon the size of the source, the air contaminants emitted, existing air quality, proximity to Class I or nonattainment areas, or areas where increment has been substantially consumed. The air quality impact analysis, in general, will not be required of the applicant for those regulated pollutants which are not listed under "significant emissions" at Chapter 100. The analysis shall be conducted in accordance with the provisions of Chapter 116, Section VII(E) and Appendix A of this Chapter.

1. **Monitoring.** Monitoring done by the owner or operator shall conform to the requirements of 40 CFR Part 58, Appendix B and the Department's Quality Assurance Plan (or other plan approved by the Department) during the operation of monitoring stations.

**NOTE:** It is recommended that a written protocol be developed by the owner or operator and the Department when a source is required to conduct either pre-construction or post-construction monitoring. The protocol shall, at a minimum, specify the monitoring sites, frequency of sampling, data recovery, pollutants, and monitoring method.

2. **Modeling**

a. All estimates of ambient concentrations required by an ambient or increment impact analysis shall be based on the applicable air quality models, data bases, and other requirements specified in the current Appendix W of 40 CFR Part 51, "Guideline on Air Quality Models" (Revised), and in accordance with Section VII(E) and Appendix A of this Chapter. Fugitive emissions, to the extent quantifiable, shall be considered.

**NOTE:** These guidelines require evaluation of the effect of terrain on ambient concentrations.

b. All preprocessed meteorological data used in refined modeling analyses shall be submitted to the Department on 3½" diskettes formatted for use by computer software which the Department uses (see Appendix A) unless otherwise approved by the Commissioner.

c. Where an air quality impact model specified in the Appendix W of 40 CFR Part 51, "Guideline on Air Quality Models" (Revised), is inappropriate, the model may be changed or another model substituted; such change or substitution shall be subject to public comment and the written approval of the Department and the Regional Administrator of the U.S. Environmental Protection Agency or his designee. Methods like those outlined in the Protocol for Determining the Best Performing Model (EPA- 454/R-92-025) and the Interim Procedures for Evaluating Air Quality Models: Experience with Implementation (EPA-450/4~85-006) should be used to determine the comparability of air quality models.

## **B. Renewals**

1. A previously submitted impact analysis shall be acceptable unless:

a. It has been found to be deficient with respect to requirements set forth in Section VII(A);

b. The impact analysis fails to reflect available information with respect to ambient air quality levels in the area, which, based upon the Department's expertise, may reasonably be expected to be significantly impacted by the source;

c. The source emits an air contaminant for which an ambient air quality standard has been adopted and whose impact was not addressed in the original impact analysis; or

d. The renewal is in conjunction with a modification (Section VII(C) or (D)).

2. Continuation of an ambient air monitoring or meteorological monitoring program shall be made on a case-by-case basis at the time of the renewal. It shall be the burden of the applicant to demonstrate the adequacy of existing data, its relationship to past, present, and future facility operating conditions, and the adequacy of other means to document continuing compliance.

3. An existing source shall be exempt from an impact analysis with respect to an air contaminant whose allowable emissions, after the application of control technology requirements specified in Section VI, do not exceed the following, unless the source is located in or near a Class I area or all area where the available air quality is limited, or other extenuating circumstances exist:

a. 50 tons per year (tpy) for Sulfur dioxide;

b. 250 tpy for VOC, or CO;

c. 25 tpy for PM<sub>10</sub>; or

d. 100 tpy for NO<sub>x</sub> (measured as NO<sub>2</sub>).

**C. New sources and modifications.** The level of air quality analyses and monitoring for any new source or modification, which is not a major new source or major modification, shall be determined on a case-by-case basis considering:

1. Air quality data available in or representative of the area;

2. Similarity with other licensed sources in terms of size, emissions, and local topography;

3. Location, including proximity to Class I areas, integral vistas, nonattainment areas or areas where increment has been substantially consumed; and

4. The results of previous air quality analyses.

An analysis may be required, even in cases resulting in no increases in emissions, if a stack height is less than Good Engineering Practice or if there are changes in stack or building configurations or other factors which are determined to alter the dispersion characteristics of the source.

**NOTE:** If a source of NO<sub>x</sub> is subject to both the Prevention of Significant Deterioration

(PSD) and New Source Review (NSR) thresholds, the source must comply with the nonattainment area NSR provisions for ozone as well as modeling requirements for the NO<sub>2</sub> National Ambient Air Quality Standard, NO<sub>2</sub> increment, and Class I areas analyses, etc.

**D. Major new sources and major modifications.** This section shall be applicable to any major new source or major modification.

**1. Pre-construction monitoring**

- a. For those pollutants for which there is an ambient air quality standard (except nonmethane Hydrocarbons) the analysis shall consist of continuous air quality monitoring data gathered over a period of one year and shall represent the year preceding the application. If the Department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year the application may be deemed acceptable for processing based on the data gathered over that shorter period. The period shall not be less than 4 months. The applicant must demonstrate that such shorter period, or period other than the preceding year, is representative of ambient concentrations under the seasonal conditions expected to record the highest concentrations.
- b. For those pollutants for which no ambient air quality standard exists, the analysis shall contain such air quality monitoring data as the Department determines is necessary and feasible in light of methods available to monitor such pollutants.
- c. In areas where meteorological monitoring data are not available or the Department deems that the available data are inadequate or not representative, the new source or modification shall be required to collect preconstruction meteorological data sufficient for air quality modeling. At least one year of data is required to be used in the modeling to support the application.
- d. A source or modification shall be exempt from the preconstruction monitoring requirements of this subsection if the emissions increase of a pollutant would cause, in every area, air quality impacts less than the following amounts:
  - i. Carbon monoxide – 575 µg/m<sup>3</sup>, 8-hr. average;
  - ii. Nitrogen dioxide – 14 µg/m<sup>3</sup>, annual average;



- iii. Sulfur dioxide –  $13 \mu\text{g}/\text{m}^3$ , 24-hr. average;
- iv. Ozone--No de minimus air quality level is provided for ozone. Any sources having a net emissions increase of 100 tpy or more of Volatile Organic Compounds (excluding negligibly photochemically reactive VOC) shall conduct ambient air monitoring except that when such source satisfies the condition of 40 CFR Part 51, Appendix S, Section IV, post-approval monitoring data for ozone may be substituted for preconstruction data;
- v. Lead-- $0.1 \mu\text{g}/\text{m}^3$ , 24-hr. average;
- vi. Mercury –  $0.25 \mu\text{g}/\text{m}^3$  24-hr. average;
- vii. Beryllium –  $0.0005 \mu\text{g}/\text{m}^3$ , 24-hr. average;
- viii. Fluorides-- $0.25 \mu\text{g}/\text{m}^3$  24-hr. average;
- ix. Vinyl chloride –  $15 \mu\text{g}/\text{m}^3$  24-hr. average;
- x. Total reduced sulfur –  $10 \mu\text{g}/\text{m}^3$ , 1-hr. average;
- xi. Hydrogen sulfide –  $0.04 \mu\text{g}/\text{m}^3$ , 1-hr. average;
- xii. Reduced sulfur compounds –  $10 \mu\text{g}/\text{m}^3$  1-hr;
- xiii. Chromium –  $0.02 \mu\text{g}/\text{m}^3$ , 24 hr. average; and
- xiv.  $\text{PM}_{10}$  –  $10 \mu\text{g}/\text{m}^3$ , 24 hr. average.

**2. Ambient air quality standards analysis.** An ambient air quality standards analysis shall be submitted which includes dispersion modeling for each pollutant for which there is an ambient standard (except nonmethane hydrocarbons) adopted pursuant to Chapter 110 of the Department's regulations. The analysis also shall include ambient air monitoring, meteorological and topographic data necessary to estimate such impact, as well as an analysis of the impact of all other sources in the area with actual emissions of 100 tpy or more of the same pollutant. At a minimum, this analysis shall include all such sources that emit more than 100 tpy of a given regulated pollutant located within the lesser of 10 km or the area, which, based upon the Department's expertise, may reasonably be expected to be significantly impacted by the proposed source or modification.

**NOTE:** The impact of sources not included in the modeling analysis will be

obtained through an analysis of ambient monitoring data as outlined in the Departments guidelines for the determination of background concentrations.

**3. Ambient increment analysis.** An increment analysis shall be submitted for each pollutant for which there is an ambient increment adopted pursuant to Chapter 110 of the Department's regulations. The analysis shall include meteorological and topographical data necessary to estimate such impact, as well as an analysis of the air quality impacts and nature and extent of any or all general, commercial, residential, industrial and other growth including increases in mobile source and area source emissions which has occurred since the baseline date, and therefore have consumed increment in the area the source or modification will significantly impact. This analysis shall be conducted in accordance with the modeling provisions of this section.

**NOTE:** All emissions not included in baseline year emissions consume increment, even though an analysis may not have been required. The Department will track increment-consuming emissions and provide the data to the applicant for inclusion in the increment analysis.

**4. Additional impact analysis.** The proposed new source or modification shall provide an additional impact analysis of:

- a. The impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general, commercial, residential, industrial and other growth associated with the source or modification, except that an analysis of the impact on vegetation having no significant commercial or recreational value is not required;
- b. The air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the facility or modification; and
- c. The impact, including visibility impairment, on any Class I area or integral vista.

**5. Class I areas**

- a. The applicant shall provide a copy of the application for a proposed new source or modification to the affected Federal Land Manager and notification that it has done so to the Department, prior to the acceptance of the application if:
  - i. The new source or modification seeks to locate or is located

within 10 kilometers of the boundaries of a Class I area;

ii. The new source or modification seeks to locate or is located within 100 km of the boundaries of a Class I area and has the potential to emit more than 100 tpy of any air contaminant;

iii. The new source or modification seeks to locate anywhere in the State and has the potential to emit in excess of 100 tpy of either volatile organic compounds, excluding negligibly photochemically reactive VOC, or NO<sub>x</sub>;

iv. The allowable emissions of a pollutant by a new source or modification whose increased emissions will have a significant impact on the Class I area; or

v. The new facility or modification may affect visibility in any Class I area, including any integral vistas for that Class I area, designated by the Department. Notification, in this case, must be made in writing and include a copy of all information relevant to the application including an analysis of the anticipated impacts on visibility.

**NOTE:** The appropriate contacts for Federal Lands are:

**1) Roosevelt Campobello International Park**

Chairman, Roosevelt Campobello International Park Commission  
P.O. Box 97  
Lubec, Maine 04652

**2) Moosehorn National Wildlife Refuge**

Local:

Refuge Manager  
Moosehorn National Wildlife Refuge  
Box X  
Calais, Maine 04619

National:

Chief, Air Quality Division  
National Park Service  
P.O. Box 25287  
Denver, Colorado 80225

**3) Acadia National Park**

Local:

National:

Superintendent  
Acadia National Park, and  
Regional Director  
North Atlantic Region  
National Park Service  
15 State Street  
Boston, MA 02109

Chief  
Air Quality Division  
National Park Service  
P.O. Box 25287  
Denver, CO 80225

**4) Great Gulf and Presidential Range, New Hampshire**

Local:

Regional Office:

Director  
White Mountain National Forest  
P.O. Box 638  
Laconia, New Hampshire 03246

Director  
U. S. Forest Service  
Department of Agriculture  
310 West Wisconsin Avenue  
Milwaukee, Wisconsin 53203

**5) Indian Nations**

Indian Township  
Tribal Office, P.O. 301  
Princeton, Maine 04668

Penobscot Indian Nation  
Community Building  
Indian Island  
Old Town, Maine 04468

Pleasant Point Reservation  
P.O. Box 343  
Perry, Maine 04667

b. For the purposes of this section, the Class I area shall include any conservation easements under the jurisdiction of an appropriate federal land manager as of August 7, 1977.

c. Where the Department receives advance notification (e.g. early consultation with the source prior to submission of the application or notification of intent to monitor) of an application of a source that may affect visibility, the Department shall notify all affected Federal Land Managers within 30 days of such notification.

d. The Department shall notify the appropriate Federal Land Manager at least 60 days prior to any public hearing on a proposed new source or modification which affects a Class I area or integral vista. Such notification shall include an analysis of the anticipated impacts on visibility.

e. The Department shall consider any analysis and comment by the affected Federal Land manager received during the public comment period with respect to the impact of the new source or modification on the ambient increments and air quality related values, including visibility, of the Class I area and any affected integral vista. If the Department does not concur with the analysis of the Federal Land Manager concerning adverse impacts, if any, a public hearing shall be held. At the public hearing, the owner or operator of the major new source or major modification shall have an opportunity to demonstrate that particulate matter, nitrogen dioxide and sulfur dioxide emissions will not cause or contribute to impacts that exceed the maximum allowable impacts for a Class I area or an integral vista for that Class I area. The public notice for such hearing shall explain the nature of the disagreement or state where the explanation may be obtained. If the Board concurs with the demonstration of the Federal Land Manager, that there will be a significant adverse impact on air quality related values, notwithstanding that the change in emissions would not cause or contribute to concentrations which would exceed the ambient increments for a Class I area, the emission license shall be denied. The Department may require conditions for an emission license so as to mitigate or prevent adverse impacts, including visibility impacts.

**NOTE:** A proposed new source or modification may apply for a variance to ambient increments applicable to Class I areas pursuant to Title 38 M.R.S.A. Section 587, last paragraph, which incorporates the variances authorized by Section 165(d) of the U.S. Clean Air Act, 42 U.S.C.A. Section 7475(d).

f. In addition to the impact analysis required in Sections VII(D)(2), (3), and (4) proposed new source or modification subject to this section may be required to conduct monitoring to establish the condition of and impact on air quality related values (including visibility) in an affected Class I area(s) or integral vistas both prior to completing an application for an emission license and during construction and operation of such source.

**6. Post-construction monitoring.** The owner or operator, shall after construction of the new source or modification, conduct such ambient monitoring or meteorological monitoring as the Department determines is necessary to

determine the effect emissions from the new source or modification may have, or are having, on air quality in any area.

A new source or modification shall be exempt from the requirements of this section if its emissions do not significantly impact a Class I area or an area where the increment is known to be violated or substantially consumed, and

- a. The allowable emissions increase will be temporary, not to exceed 2 years; and
- b. Any licensed portable source shall not increase, nor exceed, the allowable emissions and reasonable notice of not less than 10 working days prior to the relocation shall be given to the Department concerning its proposed location and probable duration of operation at the new location.

#### **E. Modeling/data collection protocol**

Any air quality dispersion modeling or data collection program shall be developed consistent with the following requirements:

1. **Guidance.** All air quality dispersion modeling and meteorological data collection shall be conducted consistent with Appendix A.
2. **Variance from guidance.** Upon an applicant's written request, the Department may grant a variance from any of the requirements set forth in Appendix A when the Department finds that the alternative proposed by the applicant will not significantly affect the accuracy of the modeling, and/or when data collection results or compliance with the requirements specified in Appendix A is technically infeasible or economically unreasonable for the applicant. For any source subject to PSD review, the variance shall be subject to EPA review and written approval. Any modeling variance shall be subject to notice and opportunity for public comment pursuant to 40 CFR Parts 51.160(f)(2) and 51.116(1)(2).
3. **Significant impact modeling protocol for SO<sub>2</sub>, NO<sub>2</sub>, CO and PM<sub>10</sub>.** Prior to undertaking significant impact modeling for SO<sub>2</sub>, NO<sub>2</sub>, CO and PM<sub>10</sub>, the applicant shall provide in writing to the Department a description of the following factors that the applicant proposes to use in the significant impact modeling demonstration:
  - a. Operating scenarios and emission units;
  - b. Air contaminants;

- c. Model(s) and methodologies;
- d. Origin of meteorological data;
- e. Period of meteorological record;
- f. Receptor grid and, if necessary, related terrain information;
- g. Any special (e.g., fenceline, air intake or flagpole) receptors;
- h. Identity of emissions which are included in baseline; and
- i. Building dimension and Good Engineering Practice (GEP) analysis techniques;

As expeditiously as possible and within thirty (30) calendar days of receipt of this information, the Department shall notify the applicant in writing that such information is complete and acceptable for modeling or notify the applicant in writing of the reason(s) why the information is not complete or not consistent with Appendix A. If the information is not complete or not consistent with Appendix A, the Department shall clearly identify the changes or additional information that must be submitted to meet the requirements of Appendix A.

**4. Submittal of significant impact modeling.** Prior to undertaking the final air quality dispersion modeling demonstration, the applicant shall submit the following for review:

- a. Significant impact modeling results (If all modeled impacts of any regulated pollutant are below the significant impact levels for all averaging periods, then no further analysis is necessary for that pollutant);
- b. Emissions data for air contaminants not in the significant impact modeling protocol;
- c. A preliminary analysis of nearby sources that will not be included in the background concentration analysis;
- d. Background concentration data; and
- e. Preprocessed meteorological data base (if required by the Department).

Within thirty (30) calendar days of receipt of this information, the Department shall notify the applicant of the following in writing:

- a. The submitted information is complete and acceptable for modeling or the reason(s) why the information is not complete or not consistent with Appendix A. If the information is not complete or not consistent with Appendix A, the Department shall clearly identify the changes or additional information that must be submitted to meet the requirements of Appendix A; and
- b. For each regulated pollutant for which there are significant impacts, the Department shall specify which operating scenarios and other nearby sources, if any, needs to be further modeled.

If the applicant requests in writing information in the possession of the Department that is required for modeling (for example, emissions which are included in baseline emissions, background data or other emissions data from nearby sources), the Department shall attempt to provide such information to the applicant within thirty (30) calendar days.

**5. Air quality dispersion modeling protocol.** If impacts from SO<sub>2</sub>, NO<sub>2</sub>, CO or PM<sub>10</sub> are above significance or if there are other regulated pollutants to be modeled, then the applicant must provide in writing to the Department, a description of the following factors (if different from previously submitted data) that the applicant proposes to use in the air quality dispersion modeling:

- a. Operating scenarios and emission units (including other nearby sources, if necessary);
- b. Air contaminants;
- c. Model(s) and methodologies;
- d. Origin of meteorological data;
- e. Period of meteorological record;
- f. Receptor grid and, if necessary, related terrain information;
- g. Any special (e.g., fenceline, air intake or flagpole) receptors;
- h. Identity of emissions which are included in baseline emissions;
- i. Building dimension and Good Engineering Practice (GEP) analysis techniques; and



j. Background concentration data.

Within thirty (30) calendar days of receipt of this information, the Department shall notify the applicant in writing that such information is complete and acceptable for modeling or notify the applicant in writing of the reason(s) why the information is not complete or not consistent with Appendix A. If the information is not complete or not consistent with Appendix A, the Department shall clearly identify the changes or additional information that must be submitted to meet the requirements of Appendix A.

When all submitted information is considered complete and acceptable for modeling; the applicant shall perform air quality dispersion modeling and submit for review the air quality dispersion modeling analysis as part of the final application submittal.

**NOTE:** The Department recommends that any applicant likely to be required to conduct and submit an air quality dispersion modeling analysis meet once with the Department staff prior to submitting the information specified in Subsection 7(E)(5). A failure by the Department to notify or provide information to the applicant as specified in this subsection does not constitute an approval of the proposed protocol and modeling.

### VIII. License Conditions

The Department may impose any appropriate and reasonable condition to insure or maintain compliance with emission standards, ambient air quality standards, regulations, orders or to impose emission limitations on previously unregulated air contaminants.

A. Every license shall be subject to the following standard conditions:

1. Employees and authorized representatives of the Department shall be allowed access to the premises of the licensee during business hours, or any time during which any of the licensed emissions units are in operation, and at such other times as the Commissioner deems necessary for the purpose of performing tests, collecting samples, conducting inspections or examining records relating to emissions;
2. The licensee shall acquire a new or amended emission license prior to commencing construction of a modification;
3. The licensee shall comply with all applicable ambient air quality standards, emission standards, Department regulations and orders;

4. The licensee shall maintain sufficient records to accurately document compliance with emission standards, including visible emissions, and license conditions and shall maintain such records for a minimum of 6 years. The records shall be submitted to the Department upon written request;
5. The licensee shall maintain records of malfunctions, failures, downtime, and any other change in operation of air pollution control apparatus or the emissions unit itself that would affect emissions. The licensee shall notify the Department within two working days (48 hours) of such occasions. Within 5 working days, the licensee shall submit a written report describing the cause, duration, remedial action, and steps to be taken to prevent recurrence of such malfunctions, failures or downtimes;
6. Approval to construct shall become invalid if the source has not commenced construction within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology requirements or the ambient air quality impact analysis, or both;
7. The licensee shall perform stack testing and submit a written report within 90 days of receipt of notice to test from the Department, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions. Such testing shall be conducted in accordance with 40 CFR Part 60 or other method approved or required by the Department and in accordance with protocols established by the Department. The licensee shall install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing;
8. The licensee shall establish and maintain a continuing program for best management practices for suppression of fugitive particulate matter during any periods of construction, renovation, or normal operation which may result in fugitive dust and submit a description of the program upon request by the Department; and
9. The licensee shall maintain sufficient records and annually report to the Department, in a specified format, fuel use, operating rates, use of materials and other information necessary to accurately update the State's emission inventory.

IX. **Procedural Requirements**

A. **General.** Unless otherwise specified in this section, the provisions of the Maine Administrative Procedures Act, Title 5, Chapter 375 and Title 38 M.R.S.A. Section 344 and Chapter 1 of Department Regulations shall apply to the processing of any application under this Chapter.

B. **Confidential and proprietary information.** All information and data submitted in a license application and at the request of the Department shall be available for public disclosure. Any exception to this general rule shall be governed by the provisions of the Right to Know Law, Title 1 M.R.S.A. Section 401 et seq. Information for which the source seeks confidential status shall be conspicuously identified in a separate document and submitted to the Department for a determination that one or more of the criteria of Title 1, M.R.S.A. Section 402(3) with respect to the exemptions from the term "public records" has been met. Such information shall not be located with the Bureau's licensing files, but shall be stored separately in accordance with procedures developed by the Commissioner. The following shall not be confidential (but shall not be interpreted to be an exclusive list):

1. Information concerning the nature and extent of the emissions of any air contaminant by a source; and
2. Information submitted by the source with respect to the economic, environmental and energy impacts of various control options in the determination of the control technology requirements of Section VI.

C. **Pre-application determinations.** Whenever a prospective applicant submits a written protocol to be followed in collecting pre-construction ambient air monitoring or meteorological data and for preparation of the air quality impact analysis at Section VII, the Department shall respond in writing within 30 working days of receipt. Such response shall provide notice of acceptance of the proposed procedures or detail what additional monitoring, modeling, or other data should be considered and included in an application in order for such application to be found to be acceptable for processing.

D. **Acceptability.** The Department shall, within 10 working days of receipt of an application, determine whether the application is in a form acceptable for processing and notify the applicant in writing of the official date on which the application was accepted or the reasons why the application was not accepted.

E. **Additional public participation for major new sources and major modifications.** In addition to the provisions of 38 M.R.S.A. section 344, and Chapter 1 of Department Regulations for any major new or major modified source, or any source proposing a stack height which will exceed Good Engineering Practice, the Department shall provide an opportunity for public review and comment which shall include:

1. A copy of the application and supporting documentation, including any demonstration study with respect to GEP, and the Department's analysis of the effect on air quality (including the amount of increment consumed) in the form of a draft order, which shall be available at the Department's Augusta office and the DEP Regional office closest to the location of the proposed new source or modification for 30 calendar days prior to the date upon which the comment period ends;
2. Notification of the public, by advertisement in a newspaper of general circulation in the region in which the proposed source would be constructed, at least 30 calendar days prior to the date upon which the public comment period ends. The notice shall announce availability of the application, the Department's preliminary determination in the form of a draft order, the degree of increment consumption that is expected from the source or modification, as well as the opportunity for submission of written public comment. The notice shall also announce the date, place and time a public meeting will be held upon request. If the Department's Augusta office receives a written request for a public hearing within 15 calendar days from the date upon which the notice is published, a public meeting will be held on the date and time as scheduled in the public notice;
3. Submittal of a copy of the public notification and a copy of the draft order to the U.S. Environmental Protection Agency, Region I, the chief executives of the municipality and county where the source proposes to locate, any comprehensive land use planning agency, and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification. Such submittal shall be at least 30 calendar days prior to the date upon which the public comment period ends;
4. Consideration of all written comments submitted within the time specified in the notice of public comment and all comments received at any public hearing in making a final decision on the approvability of the application. All comments shall be made available for public inspection in the same locations as specified in Section IX(E)(1); and
5. Notification of the applicant in writing of the final determination. Such notification shall be made available for public inspection at the same locations specified in Section IX(E)(1).

**BASIS STATEMENT :** This Chapter replaces the former Chapter 108 and deals with the air emission license program including who is required to obtain a license and the specific requirements which must be met by each applicant. The regulations address control technology requirements, air quality impact analyses requirements, license conditions, and procedural requirements for license renewals as well as for new sources and modifications of existing

sources. The changes were required in order to assure EPA approval of the State's authority to issue licenses for new sources and modifications under Title 40 Code of Federal Regulations Section 51.166.

**BASIS STATEMENT FOR AMENDMENT OF SEPTEMBER 27, 1989 :** This amendment incorporates minor changes needed for consistency with federal requirements and with deletion of the Total Suspended Particulate standards. No comments on the proposed changes were received by the Department.

**BASIS STATEMENT FOR AMENDMENT OF JUNE 13, 1990 :** This regulation was amended to implement a federally mandated nitrogen oxide (NO<sub>x</sub>) increment program in the State of Maine. As part of the Prevention of Significant Deterioration Program, these amendments establish maximum increases in pollution concentration. NO<sub>x</sub> increment standards are established and the NO<sub>x</sub> baseline concentration represents air quality existing in an area on February 8, 1988. No comments were received on the proposed amendments.

**BASIS STATEMENT FOR AMENDMENT OF NOVEMBER 23, 1993 :** This amendment was implemented pursuant to Section 14, 1991 Public Law 384, which required the development of an ambient air quality modeling protocol that includes methodologies and information to be used in air emission licensing. A specified protocol was deemed necessary due to the number of applications that had to be resubmitted for the lack of adequate modeling information, thus resulting in delayed processing. The ambient air quality modeling protocol provides an applicant for an air emission license with clear guidance on how to submit acceptable modeling needed in support of an application. The new information, which is detailed in a new Appendix A, will also facilitate the process of reviewing the modeling by Department staff. In addition to this basis statement, the Department has filed with the Secretary of State its response to comments received during the comment period.

**BASIS STATEMENT FOR AMENDMENTS OF JUNE 22, 1994 :** This regulation was amended to reflect new source review requirements contained in the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. and Chapter 113 of the Department's regulations (pertaining to growth offset regulations). In addition to this Basis Statement, the Department has filed with the Secretary of State the response to representative comments received during the comment period.

**AUTHORITY:** 38 M.R.S.A., Section 590, 585-A

**EFFECTIVE DATE:** August 9, 1988  
Amended October 25, 1989  
Amended July 10, 1990  
Amended December 12, 1993  
Amended JUL 11 1994